AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method of validating a flight plan constraint [[(C1)]], at an imposed waypoint, for [[an FMS]] a flight computer, [[(30)]] comprising the steps of:

delivering flight presets to an aerodyne during a resumption of automatic following of a flight plan after a piloted flight phase, ~~consisting, for a validation of said constraint (C1) by the FMS flight computer (30)~~, [[in]]

making a forecast of the displacement of the aerodyne up to an imposed waypoint for a validation of said constraint [[(C1)]] by the FMS flight computer, taking account of the transition between the instances of application by the aerodyne of the flight presets prevailing before the resumption of the automatic following of the flight plan and those newly provided by the [[FMS]] flight computer [[(30)]] during this same resumption, and [[in]] validating said constraint [[(C1)]] in the case where it would not be complied with by the aerodyne if it reached [[the]] an imposed waypoint by following said forecast of displacement, doing so in order that it [[(C1)]] ~~remain~~ remains taken into account in the subsequent automatic following of the flight plan.

2. (currently amended): The method as claimed in claim 1, ~~characterized in that~~ wherein the forecast of displacement of the aerodyne up to the imposed waypoint, taking account of the transition between the instances of application by the aerodyne of the flight presets prevailing before the resumption of the automatic following of the flight plan and those newly provided by the [[FMS]] flight computer [[(30)]] during the same resumption is made according to a first order variation model.

3. (currently amended): The method as claimed in claim 1, applied to the validation of an altitude constraint, ~~characterized in that~~ wherein the forecast of displacement of the aerodyne up to the imposed waypoint taking account of the transition between the instances of application by

the aerodyne of the flight presets prevailing before the resumption of the automatic following of the flight plan and those newly provided by the [[FMS]] flight computer [[(30)]] during the same resumption is limited to a vertical trajectory forecast.

4. (currently amended): The method as claimed in claim 3, ~~characterized in that~~ wherein the vertical trajectory forecast is made by assuming that the aerodyne has, during the vertical speed transition between its initial value Vz_0 before the automatic following of the flight plan by the [[FMS]] computer (30) and its final value Vz_f imposed by the [[FMS]] flight computer [[(30)]], a constant ground speed ~~"GrdSpd"~~ and a vertical speed Vz according to a first order variation model complying with the relation:

$$Vz = \left(Vz_0 - Vz_f\right)e^{\left(-t/\tau\right)} + Vz_f$$

t being the time variable and τ a constant characteristic of the aerodyne steered by its automatic pilot or its flight director, according to a law of acquisition of a vertical speed preset Vz_f.

5. (currently amended): The method as claimed in claim 3, ~~characterized in that~~ comprising: ~~it consists in:~~

- estimating the date t_{seq} of passage of the aerodyne at the constrained waypoint on the basis of the distance $\Delta dist_0$ between the position of the aerodyne upon the instigation of the automatic following of the flight plan and the position of the constrained waypoint by assuming that the aerodyne has a constant ground speed GrdSpd and by applying the relation:

$$t_{seq} = \frac{\Delta dist_0}{GrdSpd}$$

- estimating the difference in altitude Δz_{seq} of the aerodyne between the predicted altitude at the constrained waypoint and the value of the altitude constraint, by assuming that the vertical speed of the aerodyne changes, from its initial value Vz_0 before the automatic following

of the flight plan by the [[FMS]] flight computer [[(30)]] to its final value Vz_f corresponding to the flight plan and imposed by the [[FMS]] computer [[(30)]], by following a first order variation model complying with the relation:

$$\Delta z_{seq} = -\tau\left(Vz_0 - Vz_f\right)\left(1 - e^{\left(-t_{seq}/\tau\right)}\right) + Vz_f \cdot t_{seq}$$

τ being a constant characteristic of the aerodyne steered by its automatic pilot or its flight director, according to a law of acquisition of a vertical speed preset Vz_f, and

- validating the taking into account of the altitude constraint in the case of compliance with the inequality:

$$\left|\Delta z_{seq}\right| > \left|\Delta z_0\right| - \Delta z_{marg}$$

Δz_{marg} being a safety altitude margin.

6. (currently amended): The method as claimed in claim 4, ~~characterized in that~~ wherein the initial value V_{z0} of the speed of descent of the aerodyne at the moment of the resumption of the automatic following of the flight plan by the [[FMS]] flight computer [[(30)]], taken into consideration by the validation system, is measured, at the moment of the instigation of the automatic following of the flight plan, by vertical speed sensors [[(43)]] equipping the aerodyne.

7. (new): The method of claim 1, wherein the flight computer is a Flight Management System (FMS) computer.